**MRI scan**

**What is an MRI scan?**
MRI stands for Magnetic Resonance Imaging. This is a procedure which uses a powerful magnet and radio waves to produce detailed images of any part of the body. The entire scan usually takes between 20 and 120 minutes depending on which area is being examined.

**What do I bring?**
If you have a copy of the original referral letter and the MRI screening questionnaire, please bring them with you.

If you have any other X-rays, CT scans, Nuclear Medicine scans or Ultrasound scans, please bring them with you so that we can compare these images with the MRI scans.

If your child would like to bring along their favourite CD/DVD, we can play it through headphones for them during most scans.

**What happens before the MRI scan?**
You will be asked to complete and sign a questionnaire on your child’s behalf. It is important that you fill out the form accurately and ask any questions before going into the scan room. It is important to tell staff about any surgery before the scan.

Unless your child is having an anaesthetic for the scan, you may be able to stay with your child during their examination. If you would like to, you will also need to complete a screening questionnaire.

For some scans your child may need a cannula (needle) to be inserted for an injection of contrast. If this is necessary, a local anaesthetic cream can be put on their skin to help reduce discomfort. If you would like this applied, please come 60 minutes before your appointment time (our staff will be able to inform you if contrast is needed).

Your child will be changed into a hospital gown, this is to make sure that no metallic items are present within the scanner.

If your child is having a general anaesthetic for the scan, you will be sent a letter by the hospital giving specific instructions about fasting your child and when to come to hospital.

**What happens during the MRI scan?**
The MRI examination is not painful. Your child will be placed on the scanners table. Depending on which part of the body is being examined, a frame will be placed and secured around your child. This allows the pictures to be taken. The table will then slide inside the scanner and sometimes moves during the scan.

During the examination, several sets of pictures will be made, usually taking between 30 seconds and 7 minutes each. A lot of different loud tapping and buzzing sounds will be heard while the machine takes pictures. It is very important that your child does not move at this time, otherwise the pictures will be unclear and the scan may need to be repeated. Earplugs and/or headphones will be provided for hearing protection. Your child can listen to their own music, or watch a favourite movie while they are inside!

Some children do not need their parent to be present with them during the scan and they will be given a buzzer to squeeze if they need the scan to stop for any reason.
When a support person is in the room with them they may also signal the operator if there is a problem.

Between scans, the radiographer will speak to your child through a microphone, to make sure they are OK and encourage your child to lay still.

Each set of scans will appear different, but all combine to give an overall picture of the area being examined. In some cases it is necessary to give a small injection of MRI contrast media into a vein. It is used to help highlight tissues, vessels and structures more clearly which can help with making a diagnosis. It is very safe, well tolerated and passed out of the body in urine and faeces. Reactions are unusual, however, it is important, to let us know if your child has any problems with their kidneys, any allergies or if your child experiences any strange feelings during the injection.

For chest and abdominal examinations the patient will be asked to hold their breath (for approximately 10-15 seconds per set of pictures). For these scans your child may be asked not to eat before the examination or may be asked to drink oral contrast. These instructions will be given by our staff when booking the appointment.

**What happens after the scan?**

Once the scan is finished, your child can return to their normal activities. If your child needed an anaesthetic however they will be taken to a recovery area and when they are awake, transferred back to the ward.

A Radiologist will send a report to the referring doctor, which usually takes four to five working days. If you are seeing your doctor straight after the scan, he/she can phone the Radiology Department and talk to the Radiologist. In this department, no hard copies are made of the examination. The images are stored on computer and can be viewed on monitors at the hospital. If you need films of the scan, then a fee will be charged.

Please be aware the MRI unit is in the public hospital and occasionally there are delays to appointment times due to unforeseen emergencies. We will try to let you know of the delay as soon as possible to limit any inconvenience.

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**Remember:**

- As a parent you can help you child to prepare for their MRI by explaining the following important points to them before their test.
  - Although the machine makes lots of strange noises, the examination itself is not painful and does not hurt.
  - Encourage your child to practice keeping still for a few minutes at a time, and explain in age appropriate terms why they must try to stay still for clear pictures. Some children even fall asleep.
  - Help your child to choose a CD/DVD to listen/watch to during the scan.

For more information on helping children cope with procedures, please refer to SCHN factsheets from the following web-site:


If you child requires frequent procedures, and experiences anxiety you can contact the Child Life Therapy Departments at:

- Sydney Children’s Hospital - 93826984
- The Children’s Hospital at Westmead - 98453717
- John Hunter Children’s Hospital – (02)49855410